

National Aeronautics and
Space Administration



EXPLORE SCIENCE

Heliophysics

Alan Zide/Asal Naseri

Program Executive

HEP 2022 Small Explorer Step 2 Kick Off

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Program Executive Role

During Step 2, the main responsibilities of the Program Executive are:

- Lead the Technical, Management, & Cost (TMC) Panel
- Support Science Panel
- Provide NASA HQ Heliophysics perspectives at plenaries
- Respond to Q&As during the Concept Study Report phase
- Work with the Launch Services Program (LSP) representatives for Venture-class Acquisition of Dedicated and Rideshare (VADR), launch vehicle, and rideshare strategy
- Support site visits
- Engage steering committee
- Administrator Notification of a Significant Contract Action (ANOSCA) development



Program Executive (PE) vs Program Scientist (PS) Roles

Pre-phase A/Phase A

The PS leads these phases of the acquisition writing the AO/MO and leading the science panels. The PE supports the PS in certain sections of the AO/MO and leads the TMC panel. The PS leads the categorization committees and the steering committees. Finally, the PS develops the selection recommendations to NASA SMD Management.

Phase B/C/D

The PE takes the lead during these phases of the mission. In phase B, the Program Scientist helps with the development of the PLRA. After the PLRA, the PS hands the baton to the PE. The PE works with the Program Office mission manager and the project to meet the Key Decision Points and the Life Cycle Milestones. The PE is also responsible for reporting at the Flight Program Reviews (FPR) to the Deputy Associate Administrator of Programs (DAAP). The PE manages and recommends use of NASA Headquarters reserves for the mission. The PE also writes Congressional Justifications each year and provides budgets for the PPBE cycles. As the mission enters the last year before launch, the PE manages the launch campaign to the launch site. The Program Scientist becomes more active as mission operations have matured and provides guidance in developing the operational products in preparation for the Operational Readiness Review and any updates to the Phase E/F plan.

Phase E/F

The PS takes back to lead of working with the mission during the operational phase. The PE has a more minor role of managing budgets and reporting on status.



Class D Mission Myths

- Class D missions are typically smaller in dollar value than Class A-C missions, therefore fewer problems will occur and there is less to worry about; “FALSE”
- If a project doesn’t share its risks with NASA, it will reduce the burden of effort and save time and money for the project; “FALSE”
- Class D missions are less complex; thus, scheduling is not very important to mission success; “FALSE”
- Class D missions typically have fewer changes between PDR and CDR; “FALSE”
- Class D smaller teams don’t need to emphasize communications; “FALSE”
- NASA Science Mission Directorate does not spend as much time managing Class D missions; “FALSE”



Summary

- The roles of the Program Executive and Program Scientists fluctuate both in leadership and engagement during the different phases of the mission.
- It is important for the project to understand the distinctions during each of the mission phases and use the information to maximize their efficiency of execution.
- Class D missions' level of effort should not be underestimated, and HPD recognizes the energy and focus required for mission success

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